

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An active matrix display device including a display panel with pixels, a common electrode to which a common electrode voltage is applied, and a source electrode to which a source electrode voltage is applied, in which the common electrode and the source electrode are disposed so as to sandwich the display panel therebetween, and having a plurality of display modes,

the active matrix display device comprising:

storage means for storing values of optimum applied voltages, each of which voltages ~~is~~ ~~is/may be~~ applied to an electrode having a shiftable voltage waveform, so as to match a center of a voltage waveform of the common electrode voltage with a center of a voltage waveform of the source electrode voltage in each of the display modes; and

voltage applying means for reading out the value of the optimum applied voltage corresponding to the display mode from the storage means and applying the optimum applied voltage to shift the voltage waveform of the electrode, and wherein

each pixel has a switching element for switching ON and OFF application to the pixel of the source electrode voltage, in which a value of the source electrode voltage is set to a value which compensates a variation of the source electrode voltage due to parasitic capacitance of the switching element when the switching element is OFF.

2. (Previously Presented) The active matrix display device according to claim 1, wherein:

the storage means, which are connected to a common electrode drive circuit, are for storing a plurality of values of the optimum applied voltages for shifting a voltage waveform of a voltage applied to the common electrode, respectively for the display modes.

3. (Previously Presented) The active matrix display device according to claim 1, wherein:

the storage means, which are connected to a source electrode drive circuit, are for storing a plurality of values of the optimum applied voltages for shifting a voltage waveform of a voltage applied to the source electrode, respectively for the display modes.

4. (Cancelled)

5. (Cancelled)

6. (Previously Presented) The active matrix display device according to claim 1, wherein:

the storage means stores, as the optimum applied voltage, a lowest value and a voltage width of the optimum applied voltage determined by the variation and the value of the voltage which is applied to the electrode having a shiftable voltage waveform.

7. (Previously Presented) The active matrix display device according to claim 1, wherein:

the storage means stores, as the optimum applied voltage, a highest value and a voltage width of the optimum applied voltage determined by the variation and the value of the voltage which is applied to the electrode having a shiftable voltage waveform.

8. (Previously Presented) The active matrix display device according to claim 1, wherein:

the storage means stores, as the optimum applied voltage, a center value and a voltage width of the optimum applied voltage determined by the variation and the value of the voltage

which is applied to the electrode having a shiftable voltage waveform.

9. (Previously Presented) The active matrix display device according to claim 1, wherein:

values of the optimum applied voltages are voltage values to shift a center of the voltage waveform without shifting an amplitude of the voltage waveform.

10. (Currently Amended) The active matrix display device according to claim 9, wherein the switching element in each pixel is display panel comprises, in each pixel, a thin film transistor, the thin film transistor including:

the source electrode which receives a source voltage from a source signal line,

a gate electrode which receives a gate voltage from a gate signal line, and

a drain electrode which applies the source voltage to the pixel,

wherein matching of the centers of the voltage waveforms are to compensate a parasitic capacitance between the gate electrode and the drain electrode.

11. (Previously Presented) The active matrix display device according to claim 10, wherein the display modes include a reflective mode in which external light is utilized for displays with a back light turned off and a transmissive mode in which a back light is utilized for displays.

12. (Previously Presented) The active matrix display device according to claim 1, wherein the storage means stores the values of the optimum applied voltages only once during manufacture of the display device.

13. (Previously Presented) The active matrix display device according to claim 1, wherein the optimum applied voltages are different from each other with respect to each display mode.

* * * * *

END OF CLAIM LISTING